

## Message Text

UNCLASSIFIED

PAGE 01 STATE 034639

44

ORIGIN EB-07

INFO OCT-01 IO-11 ISO-00 COME-00 INT-05 OIC-02 /026 R

DRAFTED BY EB/ISM:BWMILLER:LMP

APPROVED BY EB/ICD:ACHEWITT

----- 051719

R 120412Z PEB 76

FM SECSTATE WASHDC

TO USMISSION GENEVA

UNCLAS STATE 034639

E.O. 11652: N/A

TAGS: EGEN, ECE, EIND, EMIN

SUBJECT: ECE STEEL COMMITTEE, SEMINAR ON UTILIZATION OF PRE-  
REDUCED MATERIAL IN ELECTRIC ARC FURNACES

FOR RICHARD SPRINGER

PLEASE TRANSMIT FOLLOWING ABSTRACT OF EXXON CORP. PAPER TO  
MR. MESSY OF ECE STEEL COMMITTEE SECRETARIAT FOR TRANS-  
LATION AND PROCESSING ASAP:

"IRON ORE PARITY - A CONCEPT FOR PREDICTING STEEL SCRAP AND  
DIRECT REDUCED MATERIAL PRICES" BY D.D. MACLAREN (EXXON  
ENTERPRISES, INC.); W.R. GUYER (EXXON ENTERPRISES, INC.);  
F.C. CATANEO (EXXON RESEARCH AND ENGINEERING CO); AND G.  
MAURI (EXXON RESEARCH AND ENGINEERING CO.).

THE STEEL SCRAP MARKET HAS ALWAYS BEEN CHARACTERIZED BY  
WIDE FLUCTUATIONS IN PRICE, MAKING IT DIFFICULT FOR  
ELECTRIC FURNACE STEEL MAKERS TO PROJECT THE COST OF THEIR  
BASIC RAW MATERIAL. DIRECT REDUCED IRON, AS A NEW SOURCE  
OF METALLICS, SHOULD STABILIZE FUTURE SCRAP PRICES.  
HOWEVER, THE PROBLEM OF FORECASTING SCRAP AND DIRECT  
REDUCED IRON PRICES REMAIN. THE IRON ORE PARITY CONCEPT  
WAS DEVELOPED TO HELP SOLVE THIS PROBLEM.  
UNCLASSIFIED

UNCLASSIFIED

PAGE 02 STATE 034639

IRON ORE PARITY RECOGNIZES THAT STEEL OF A GIVEN QUALITY PRODUCED FROM SCRAP AND/OR DIRECT REDUCED IRON IN AN ELECTRIC FURNACE MUST, ON THE AVERAGE, BE PRICE COMPETITIVE WITH THE SAME QUALITY STEEL PRODUCED FROM IRON ORE IN A BLAST/FURNACE BOF SHOP. SCRAP/DIRECT REDUCED IRON PARITY IS BACK-CALCULATED BY SUBTRACTING ELECTRIC FURNACE PROCESSING COSTS FROM THE COST OF STEEL PRODUCED IN A LARGE BLAST FURNACE/BOF COMPLEX WHERE THE PRICES OF IRON ORE AND COKING COAL ARE MUCH MORE STABLE AND MORE READILY FORECAST. IN AN EXPANDING STEEL MARKET, IF THE PRICES OF SCRAP AND/OR DIRECT REDUCED IRON DROP BELOW THIS PARITY, THE NEXT INCREMENTS OF CAPACITY WILL BE BASED ON ELECTRIC FURNACES WHICH WOULD THEN PRODUCE LOWER COST STEEL. ONCE THE LAW OF SUPPLY AND DEMAND FORCES THE PRICE OF SCRAP AND/OR DIRECT REDUCED IRON ABOVE PARITY, THE NEXT INCREMENT OF CAPACITY WILL BE BY BLAST FURNACE TO BRING SCRAP DEMAND BACK IN BALANCE.

OVER A PERIOD OF TIME, ACTUAL SCRAP AND/OR DIRECT REDUCED IRON PRICES SHOULD FLUCTUATE AROUND A TREND LINE BASED ON PARITY VALUES. CALCULATIONS FOR A PERIOD OF YEARS COMPARE FAVORABLY WITH THE AVERAGE HISTORICAL SCRAP PRICE TRENDS. PROJECTIONS FOR THE LATE '70'S/EARLY '80'S INDICATE AVERAGE PRICES FOR 1 HMS SOMEWHAT ABOVE 100 DOLLAR/T WITH GOOD QUALITY DIRECT REDUCED IRON ABOVE 20 PERCENT HIGHER. INGERSOLL

UNCLASSIFIED

NNN

\*\*\* Current Handling Restrictions \*\*\* n/a

\*\*\* Current Classification \*\*\* UNCLASSIFIED

## Message Attributes

**Automatic Decaptioning:** X  
**Capture Date:** 01 JAN 1994  
**Channel Indicators:** n/a  
**Current Classification:** UNCLASSIFIED  
**Concepts:** ELECTRIC POWER, FERROALLOYS, FURNACES, PARITY PRICES, POLICIES, SEMINARS  
**Control Number:** n/a  
**Copy:** SINGLE  
**Draft Date:** 12 FEB 1976  
**Decaption Date:** 01 JAN 1960  
**Decaption Note:**  
**Disposition Action:** n/a  
**Disposition Approved on Date:**  
**Disposition Authority:** n/a  
**Disposition Case Number:** n/a  
**Disposition Comment:**  
**Disposition Date:** 01 JAN 1960  
**Disposition Event:**  
**Disposition History:** n/a  
**Disposition Reason:**  
**Disposition Remarks:**  
**Document Number:** 1976STATE034639  
**Document Source:** CORE  
**Document Unique ID:** 00  
**Drafter:** BWMILLER:LMP  
**Enclosure:** n/a  
**Executive Order:** n/a  
**Errors:** n/a  
**Film Number:** D760053-1119  
**From:** STATE  
**Handling Restrictions:** n/a  
**Image Path:**  
**ISecure:** 1  
**Legacy Key:** link1976/newtext/t19760297/aaaageyr.tel  
**Line Count:** 92  
**Locator:** TEXT ON MICROFILM, TEXT ON-LINE  
**Office:** ORIGIN EB  
**Original Classification:** UNCLASSIFIED  
**Original Handling Restrictions:** n/a  
**Original Previous Classification:** n/a  
**Original Previous Handling Restrictions:** n/a  
**Page Count:** 2  
**Previous Channel Indicators:** n/a  
**Previous Classification:** n/a  
**Previous Handling Restrictions:** n/a  
**Reference:** n/a  
**Review Action:** RELEASED, APPROVED  
**Review Authority:** housmasa  
**Review Comment:** n/a  
**Review Content Flags:**  
**Review Date:** 01 JUL 2004  
**Review Event:**  
**Review Exemptions:** n/a  
**Review History:** RELEASED <01 JUL 2004 by oatisao>; APPROVED <04 OCT 2004 by housmasa>  
**Review Markings:**

Margaret P. Grafeld  
Declassified/Released  
US Department of State  
EO Systematic Review  
04 MAY 2006

**Review Media Identifier:**  
**Review Referrals:** n/a  
**Review Release Date:** n/a  
**Review Release Event:** n/a  
**Review Transfer Date:**  
**Review Withdrawn Fields:** n/a  
**Secure:** OPEN  
**Status:** <DBA CORRECTED> gwr 970922  
**Subject:** ECE STEEL COMMITTEE, SEMINAR ON UTILIZATION OF PRE- REDUCED MATERIAL IN ELECTRIC ARC FURNACES  
**TAGS:** EGEN, EIND, EMIN, ECE, EGEN, EXXON  
**To:** GENEVA  
**Type:** TE  
**Markings:** Margaret P. Grafeld Declassified/Released US Department of State EO Systematic Review 04 MAY 2006